XML QUICK REFERENCE

This *Quick Reference* lists the XML-enabled tags that the Monarch® 9825®, 9855® or 9860™ printers can interpret.

Your printer has one of the following options:

- Oracle® WMS (Warehouse Management) print jobs
- SAP NetWeaver® Auto-ID (RFID) Infrastructure (AII-DC-RFID)

The following table lists the software versions that support the XML options.

XML Options	9825	9855	9860
Oracle® WMS (Warehouse Management) print jobs	2.8	5.0	5.0
SAP NetWeaver® Auto-ID (RFID)	2.8	5.3	5.3

About This Quick Reference

This *Quick Reference* contains

- information that applies to both XML-enabled options, including "Defining the Format Header," "Using Option 21 (Define Extended Field Names)," and "Error Messages."
- specific information for each option. See the following sections as necessary based on your printer.
- a sample label format.

Note: This *Quick Reference* does not contain information about installing or setting up the printer for use on a network running Oracle® software or the SAP NetWeaver® platform.

Information in this document supercedes information in previous versions. Check our Web site (**www.paxar.com**) for the latest documentation and release information.

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AVERY DENNISON

Defining the Format Header

Use this section with either XML-enabled option. A Format Header begins a format file.

Syntax **{F,format#,action,device,measure,length, width,"name"¦**

F1. *F* — Format Header.

F2. *format#* — Number from **1-999** to identify the format.

F3. *action* — Enter **A** to add a new format to the printer.

F4. *device* — Format storage device. Use **F** (Flash).

F5. *measure* — Unit of measure: **E** (English), **M** (Metric), or **G** (Graphic Dots).

Printer	Unit of Measure	Length	Width
9855/9860	English (1/100 inch) Metric (1/10 mm) 203 dpi Dots	75-1600 191-4064 152-3248	32-400 81-1016 62-812

Refer to the optional *Packet Reference Manual* for more information.

F6. *length* — Length in selected units. Measure supply from the leading edge of one label to the leading edge of the next label. The leading edge is the edge that exits the printer first.

F7. *width* — Width, from left to right, in selected units.

F8. *"name"* — Format name, **1-256** characters, enclose within quotation marks. The name can contain special characters, excluding non-printable control characters and the quotation mark (").

Example **{F,1,A,F,E,300,200,"XML_FORMAT_ONE"¦**

Defines the name for format 1 as XML_FORMAT_ONE.

Using Option 21 (Define Extended Field Names)

Use this section with either XML-enabled option. Option 21 defines names for each field in a format, which can be longer than eight characters.

Syntax **R,21,"field_name"¦**

R1. *R*	Option Header.
R2. *21*	Option 21.
R3. *field_name*	Specifies the field name. Must be enclosed within quotations. The name can be up to 256 characters, excluding non-printable control characters and the quotation mark ("). This name must match the one specified in the *variable name* or *Field name* attribute.

Example **T,2,10,V,250,50,0,1,1,1,B,C,0,0,0¦**
R,21,"SALEPRICE_FIELD"¦

Defines the name for text field 2 as “SALEPRICE_FIELD.”

Error Messages

Use this section with either XML-enabled option. You may receive this error when using XML supported tags.

002 The Format Name must be between 1 to 8 characters inside quotes. Extended Format Names and Option 21 names can be between 1 and 256 characters excluding non-printable control characters and the quotation mark (").

About Oracle WMS Print Jobs

The XML-enabled printer contains the following 10 Oracle® Warehouse Management print jobs (label formats):

- LPN Label
- LPN Summary Label
- Serial Label
- Shipping Label
- WIP Content Label
- LPN Content Label
- Material Label
- Location Label
- Shipping Content Label
- Flow Content Label

Refer to your *Oracle® Integration Certification Document – Oracle Warehouse Management Label Printing Integration Kit* for information about the format layout and descriptions of each field on the formats.

When you turn on the printer, you see

```
WMS XML
Mode Ready
```

When you print test labels, the model number appears as **M9855X**, for example.

Supported Tags – Oracle WMS Print Jobs

There are three supported XML tags for Oracle Warehouse Management print jobs. The printer ignores any other XML tags/attributes not defined in this document and no error is reported.

Syntax

```
<labels attributes="values">
<label attributes="values">
<variable name="name">data</variable>
</label>
</labels>
```

labels — This tag contains one or more labels, which may include one or more of the following attributes:

- _FORMAT — The default name of the format. This name must match the one specified in the Format Header.
- _QUANTITY — Quantity to print. 1 is the default.

label — This tag contains a single label, which may include one or more of the following attributes:

- *_FORMAT* — The default name of the format. This name must match the one specified in the *Format Header*. If no format name is given, then the default format name from the *labels* tag *_FORMAT* attribute is used.
- *_QUANTITY* — Quantity to print. If no quantity is specified, then the default quantity from the *labels* tag *_QUANTITY* attribute is used.

variable — This tag specifies the field name and the variable field data. It must contain the following attribute:

- *name* — The name of the field that matches the ones specified using Option 21. It must contain the variable data (batch data) associated with the format.

Sample MPCL Format

```
{F,1,A,F,E,400,400,"XML_FORMAT_ONE" ¦
T,1,25,V,20,20,0,1,1,1,B,L,0,0¦
R,21,"TEXT_FIELD_XML"¦
B,2,30,V,100,20,8,8,75,0,L,0¦
R,21,"CODE_128_BARCODE_FIELD_XML"¦}
```

This MPCL format uses:

- format – **XML_FORMAT_ONE**
- text field – **TEXT_FIELD_XML**
- bar code field – **CODE_128_BARCODE_FIELD_XML**.

Sample XML Print Job

```
<?xml version="1.0" encoding="UTF-8"
standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT ="XML_FORMAT_ONE" _QUANTITY="1">
<label>
<variable name= "TEXT_FIELD_XML">XML Test
Label</variable>
<variable name=
"CODE_128_BARCODE_FIELD_XML">Code128data</variable>
</label>
</labels>
```

This XML print job uses:

- format – **XML_FORMAT_ONE**
- text field – **TEXT_FIELD_XML** with data – **XML Test Label**
- bar code field – **CODE_128_BARCODE_FIELD_XML** with data – **Code128data.**

The XML-enabled printer is designed for use with the SAP NetWeaver® platform and the Auto-ID Infrastructure component (AII-DC-RFID).

When you turn on the printer, you see

```
SAP XML
Mode Ready
```

When you print test labels, the model number appears as **M9855X**, for example.

Supported Tags – SAP Auto-ID Infrastructure

There are five supported XML tags for the SAP NetWeaver Auto-ID Infrastructure. The printer ignores any other XML tags/attributes not defined in this document and no error is reported.

Syntax

```
<Command>
 <WriteTagData attributes="values">
 <Item>
 <FieldList attributes="values">
  <Field attributes="values">
  </Field>
  </FieldList>
  </Item>
  </WriteTagData>
  </Command>
```

Command	This tag contains one or more WriteTagData tags. There are no attributes required. The xmlns:xis attribute is ignored.
WriteTagData	This tag contains one or more Item tags. There are no attributes required. The readerID attribute is ignored.
Item	This tag contains one FieldList tag or multiple TagID tags. There are no attributes required. The TagID tag is ignored.

FieldList This tag contains one or more Field tags, which may include one or more of the following attributes:

- *format* — The default name of the format. This name must match the one specified in the *Format Header*. This attribute is required.
- *jobname* — This attribute is ignored.
- *quantity* — Quantity to print. 1 is the default. This attribute is optional.

Field This tag specifies the field name and the variable field data. It must contain the following attribute:

- *name* — The name of the field that matches the ones specified using Option 21. It must contain the variable data (batch data) associated with the format.

  Note: The SAP software sends RFID data in a field named “EPC”. Apply Option 21 to the RFID Data Field and name that field “EPC”.

Sample MPCL Format

```
{F,1,A,F,E,600,400,"EPC_FORMAT_3"¦
C,560,10,0,1,1,1,O,L,0,0,"DOCUMENT_NO:"¦
T,1,40,V,560,140,0,1,1,1,O,L,0,0¦
R,21,"DOCUMENT_NO"¦
C,520,10,0,1,1,1,O,L,0,0,"DOCUMENT_TYPE:" ¦
T,2,40,V,520,150,0,1,1,1,O,L,0,0¦
R,21,"DOCUMENT_TYPE"¦
C,480,10,0,1,1,1,O,L,0,0,"EPC_TYPE:" ¦
T,3,40,V,480,110,0,1,1,1,O,L,0,0¦
R,21,"EPC_TYPE"¦
C,440,10,0,1,1,1,O,L,0,0,"EPC_URN:"¦
T,4,60,V,420,20,0,1,1,1,O,L,0,0¦
R,21,"EPC_URN"¦
C,380,10,0,1,1,1,O,L,0,0,"EPC_URN_NO_HEADER:"¦
T,5,40,V,380,180,0,1,1,1,O,L,0,0¦
R,21,"EPC_URN_NO_HEADER"¦
C,340,10,0,1,1,1,O,L,0,0,"GTIN:"¦
T,6,40,V,340,80,0,1,1,1,O,L,0,0¦
R,21,"GTIN"¦
C,300,10,0,1,1,1,O,L,0,0,"PRODUCT:"¦
T,7,40,V,300,100,0,1,1,1,O,L,0,0¦
R,21,"PRODUCT"¦
C,260,10,0,1,1,1,O,L,0,0,"PRODUCT_DESCRIP:"¦
T,8,40,V,260,160,0,1,1,1,O,L,0,0¦
R,21,"PRODUCT_DESCRIPTION"¦
X,99,24¦
R,21,"EPC"¦}
```

This MPCL format uses:

- format – **EPC_FORMAT_3**
- text field – **DOCUMENT_NO**
- text field – **DOCUMENT_TYPE**
- text field – **EPC_TYPE**
- text field – **EPC_URN**
- text field – **EPC_URN_NO_HEADER**
- text field – **GTIN**
- text field – **PRODUCT**
- text field – **PRODUCT_DESCRIPTION**
- RFID data field – **EPC** (line beginning with X).

Sample XML Print Job

```
<?xml version="1.0" encoding="UTF-8" ?>
 <Command xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:noNamespaceSchemaLocation="Command.xsd">
 <WriteTagData readerID="ICC_HTTP_DEVICE">
 <Item>
 <FieldList format="EPC_FORMAT_3"
jobName="WRITE20051215190125" quantity="1">
  <Field name="DOCUMENT_NO">Nov_29_02</Field>
  <Field name="DOCUMENT_TYPE">51</Field>
  <Field name="EPC">307402422040314000000001C</Field>
  <Field name="EPC_TYPE">SGTIN-96</Field>
  <Field name="EPC_URN">urn:epc:tag:sgtin-
96:3.0037000.065733.28</Field>
  <Field name="EPC_URN_NO_HEADER">3.0037000.065733.28</Field>
  <Field name="GTIN">00037000657330</Field>
  <Field name="PRODUCT">RFID_MAT1</Field>
  <Field name="PRODUCT_DESCRIPTION">RFID Material 1</Field>
  </FieldList>
  </Item>
  </WriteTagData>
  </Command>
```

This XML print job uses:

- format – **EPC_FORMAT_3**
- text field – **DOCUMENT_NO** with data – **Nov_29_02**
- text field – **DOCUMENT_TYPE** with data – **51**
- RFID Data Field – **EPC** with data – **307402422040314000000001C**
- text field – **EPC_TYPE** with data – **SGTIN-96**
- text field – **EPC_URN** with data – **urn:epc:tag:sgtin-96:3.0037000.065733.28**
- text field – **EPC_URN_NO_HEADER** with data – **3.0037000.065733.28**
- text field – **GTIN** with data – **00037000657330**
- text field – **PRODUCT** with data – **RFID_MAT1**
- text field – **PRODUCT_DESCRIPTION** with data – **RFID Material 1.**

```
DOCUMENT_NO:    Nov_29_02

DOCUMENT_TYPE:   51

EPC_TYPE:   SGTIN-96

EPC_URN:
 urn:epc:tag:sgtin-96:3.0037000.065733.28

EPC_URN_NO_HEADER:   3.0037000.065733.28

GTIN:    00037000657330

PRODUCT:   RFID_MAT1

PRODUCT_DESCRIP:  RFID Material 1
```

Sample Label